

ABSTRACT

A method of printing and the related printer architecture for receiving compressed page data that includes both contone data and foreground bi-level data. Both the contone data and the foreground bi-level data are decompressed. The contone data is halftoned to bi-level color data. The foreground bi-level data is composited over the bi-level color data to create composited bi-level color image data that is then printed. The related printer architecture includes an integrated circuit that includes a processor bus and purpose-specific functional units each connected to the processor bus. The functional units include a JPEG decoder, a bi-level decoder, a halftoner, and a program ROM. A general-purpose processor is connected to the processor bus for controlling the functional units. The processor runs software that coordinates the functional units to receive, expand and print pages.